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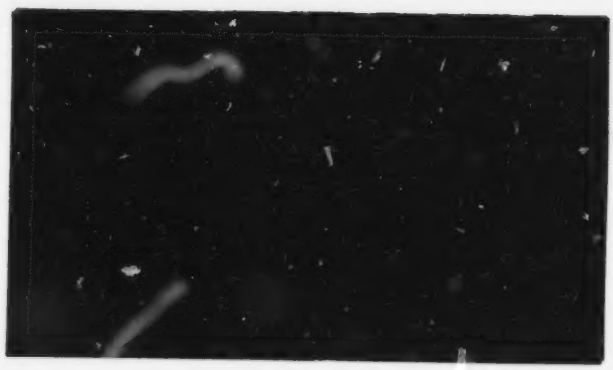

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COMMUNITY CRIME PREVENTION

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ABSTRACT

This paper is intended to help crime prevention program practitioners assess the suitability of various crime prevention programs specific to their needs.

An extensive review of crime prevention program evaluations was conducted to reveal common concerns and problems. Both theoretical issues pertaining to crime prevention and methodological issues related to program evaluation were examined. This paper attempts to facilitate rational planning to avoid unrealistic expectations.

The paper is divided into four sections: pro-active approaches in crime prevention which are community-based and victim/environment oriented; a review of property marking, environmental design and avoidance theories in crime prevention; theoretical problems and inherent limitations of crime prevention; and factors to consider in developing crime prevention strategies for a specific problem in a specific site.

This paper suggests that a comprehensive set of strategies be developed in response to clearly defined crime needs of a given community.

EXECUTIVE SUMMARY

This paper is intended to help crime prevention program practitioners assess the suitability of various crime prevention programs in the light of their particular needs. Not every program 'works' for every situation. Given the cost of implementing a crime prevention program, it is wise to first consider the limitations and applications of various programs. This will allow you to develop a program that is best suited to the particular situation in which it is being applied.

An extensive review of crime prevention program evaluations was conducted in order to uncover common concerns and problems. Both theoretical issues pertaining to crime prevention and methodological issues related to program evaluation were examined. This paper highlights these issues in an attempt to facilitate rational planning and avoid unrealistic expectations.

I. Crime Prevention Strategies: General Themes

Our intent was to examine specifically 'proactive' programs which are community-based and victim/environment oriented. The following general themes emerge:

- Collective strategies (Neighbourhood Watch, Crime Alert, Block Watch) are preferred above individual strategies (target hardening, property marking).

- Community responses help to reduce feelings of isolation while individual responses may increase feelings of isolation. Since feelings

of isolation are related to fear of crime, collective strategies are much more effective in reducing fear.

- The benefits of individual protective responses apply only to participants. It is possible that the risk of criminal victimization is increased among non-participants. Collective strategies are more likely to benefit the whole community.

- Target hardening is a useful strategy when used to complement collective strategies. Used in isolation, target hardening may increase fear of crime and reduce community solidarity.

- Property marking programs are often ineffective in reducing rates of property crimes. Furthermore, such programs fail to meet the intended goal of increasing the recoverability of stolen items.

- Physical design changes (such as CPTED) can enhance community involvement in crime prevention. Applied in this way, environmental design can be effective in reducing crime and fear of crime.

- Personal contact is preferred above media efforts in obtaining crime prevention program participation. Media campaigns are best utilized for providing generalized information. Long-term behavioural changes are unlikely to result from media campaigns. Media campaigns are most effective when used to complement personal contact.

II. Issues in Crime Prevention

- Community strategies are most successful where a sense of community is high. They are more difficult to implement where community solidarity is lacking. This presents a problem in that crime rates tend to be higher where community solidarity is weak. Thus, community

strategies are more easily implemented and work best where they are needed the least.

- Increased reporting and citizen intervention is not an automatic by-product of any crime prevention program. The extent to which citizens will report crimes depends upon:

- identification with the property or victim;
- social support in interpreting an event as a crime;
- attitudes toward police (Do the police care?, Can they do anything?)
- knowledge of the offender;
- fear of retaliation.

Thus, programs designed to encourage reporting of crimes must instill confidence in the police and minimize the danger of retaliation. Simply appealing to citizens' sense of 'social responsibility' is insufficient.

- Crime rates and fear of crime are not always consistent. Programs designed to reduce crime rates can inadvertently raise crime fear.

- Fear of crime is an individual response leading to withdrawal and isolation. Individual fear of crime is reduced by fostering a collective concern about crime. Fear paralyses individuals while concern motivates people to become effectively involved.

- Crime prevention rests on the assumption that crime is a function of opportunity. To the extent that this is true, blocking opportunity will reduce crime. This assumes that opportunity precedes motivation to commit a crime. Such is not always the case.

If crime prevention makes opportunity difficult under one circumstance, it is possible that criminal activity will be displaced to more favourable circumstances. Attempts to measure crime displacement have often ignored many of the theoretically possible displacement effects.

III. Effective Crime Prevention Programs

- Programs are weakened when an attempt is made to accomplish too much with a variety of strategies. This is especially true where financial or human resources are limited.

- Replication of a program that has been successful elsewhere does not guarantee success. Crime analysis is needed to allow crime prevention program planners to modify a successful program in order to meet the needs of a particular situation.

- The applicability of a crime prevention program may vary according to factors other than crime rates. Geographic, demographic and ethnic variables may affect the applicability of a crime prevention program to a particular area.

- Crime prevention programs are more effective where commitment to crime prevention is given a high priority within a police department.

- Programs are weak where roles and responsibilities are poorly specified. This creates the possibility of making crime prevention a 'grab bag' for any non-traditional police work or community relations assignments.

- Evaluations of crime prevention programs should be specified along with program design. Evaluation then becomes a monitoring aspect of the program rather than an afterthought.

I. INTRODUCTION

In this report we examine the effectiveness of various crime prevention efforts. Following a review of the general themes of crime prevention, a four-fold typology of community-based crime prevention strategies is proposed. This typology can be regarded as a heuristic device to better enable us to isolate certain elements of crime prevention strategies. Actual programs typically involve several of these elements. Following the discussion of various strategies outlined in the typology, we will discuss some of the theoretical problems and inherent limitations of crime prevention efforts. The purpose of this discussion is to help the reader avoid unrealistic expectations with respect to the success of crime prevention programs. The final section deals with the question of 'what works' in crime prevention. It is suggested that this question can only be properly addressed once the particular nature of the crime prevention needs of a given area have been clearly defined.

Proactive vs Reactive Approaches

Crime prevention techniques involve a 'proactive' rather than a 'reactive' response to criminal activity. Reactive responses attempt to undo the negative effects of victimization after a crime has taken place. Proactive responses reduce the possibilities of criminal victimization 'before the fact' by minimizing criminal opportunity in the victim's own environment.

The proactive approach is based upon the assumption that a criminal event is a product of criminal tendency on the part of the offender and opportunity provided by the behaviour of the victim and structure of the

physical environment. Petrunik (1982) suggests a typology of crime prevention according to whether such approaches are based on formal criminal justice responsibility or on community involvement and whether the approaches are oriented toward the offender (motivation oriented) or toward the victim/environment (opportunity oriented). The concern in this paper is with the community based victim/environment oriented type of programs. However, it is useful to place this type of crime prevention into perspective by considering its relation to crime prevention generally. Petrunik's typology is illustrated in the table below (1982:23).

Table 1 Approaches to Crime and Delinquency Prevention

	Justice-System Based	Community Based
Offender Oriented	Incarceration to incapacitate and/or treat offenders; probation; parole	Economic, educational and counselling programs for potential offenders and sometimes referred to as 'positive crime prevention'
Defensive or victim/environment oriented	Police patrol and investigative strategies	Education of potential victims; security devices (locks, etc.); environmental and architectural design

Offender-Oriented Approaches

A great deal of social scientific literature has traditionally been focused upon the offender-oriented approaches. Attempts to uncover the psychological, sociological, and economic 'causes' of crime have resulted in a variety of punitive and corrective approaches to crime

prevention. One of the difficulties with the motivation-orientation approach is that the variables dealing with social structure and culture are often difficult to control or apply in any rigorous fashion. As a result, they are difficult to manipulate by conscious design. In addition, punitive and corrective approaches cannot be applied 'before-the-fact' since potential offenders are not known.

Victim/Environment Approaches

Victim/environment oriented crime prevention techniques are more amenable to conscious design in that they concern the conditions and circumstances that can be altered through governmental, community, or private action. Physical factors which provide criminal opportunity can be redesigned in such a way as to reduce those opportunities. Victims and potential victims can be educated concerning ways of avoiding interactions with criminals. This approach holds considerable promise in that it focuses upon conditions which can be changed by people who want to change them. Approaching the problem of crime from the pragmatic viewpoint of the victim and the environment appears to be a more manageable approach to preventing crime crime than does the motivation-oriented approach. Stanley (1977), however, warns that the danger of the opportunity-oriented approach lies in the fact that its rather pragmatic nature makes it particularly susceptible to its being "applied in a rather 'cook book' fashion without due regard for its limitations and the needs of the particular situation in which it is being applied." Furthermore, the use of this approach to the exclusion of crime prevention from the motivation viewpoint ignores the question of how

opportunity and motivation are related and the extent to which motivation may be reduced when opportunity is minimized.

Following Petrunik's typology, victim/environment oriented crime prevention approaches can be either justice-system based (police patrol and investigation) or community-based. Our concern in this report is primarily with the community-based crime prevention strategies.

Community Based Programs

It should be pointed out that one of the factors contributing to the increased popularity of community-based preventive efforts has been a realization on the part of both the police and the community that police patrol and investigative resources are limited in their ability to prevent a great deal of crime (Kelling, et al, 1974). A number of studies have indicated that the nature of much criminal activity is such that the police cannot be expected to accomplish the whole task of crime prevention (Schell, 1976; Kelling, 1978; Goldstein, 1979; Engstad and Evans, 1980). In addition, much police time is taken up with non-crime related duties (Clarke and Heal, 1978). Strengthening police preventive patrol may contribute further to the problem by encouraging the public to relinquish its sense of social responsibility (Robinson, 1977). While none of these studies would suggest that police are not needed, they strongly agree that the whole responsibility for crime prevention should not lie exclusively with the police. The recognition of inherent limitations to the effectiveness of policing has led the criminal justice system to encourage citizen involvement in crime prevention.

These community-based crime prevention efforts are normally implemented or at least coordinated by local police forces. Therefore, it

would be misleading to discuss community crime prevention as if it were separate from police crime prevention efforts. The term 'citizen-based' is used to define that area of citizen co-operation with local police forces in preventing crime.

Community-based crime prevention can reduce opportunity for victimization in a number of ways.

1. Opportunity can be made more difficult. Potential targets can be made less vulnerable through restricting access to criminals and placing barriers between the offender and the target. This is referred to as target hardening.
2. Second, opportunity can be disguised by making the target appear less vulnerable or inviting. For example, an unoccupied home can be made to appear occupied by having neighbours pick up mail, cut the grass, or deposit garbage in the garbage cans while the residents are vacationing. In this case, a potential target is made to appear inaccessible.
3. Third, opportunity can be discouraged through indirect means such as making the target less valuable (marked goods, for example, may be more difficult to fence) or more risky (warning decals, burglar alarms, etc.) This has the effect of balancing the cost/benefit ratio against the offender.
4. Finally, opportunity can be reduced through increasing the potential observability of the criminal act. Well-lit streets and homes or the presence of potential witnesses increase the offender's chance of being noticed. The potential for observability increases the risk of apprehension or identification.

It is assumed that these risk factors are taken into consideration by the potential offender assessing the opportunity for crime. It can readily be seen that the additional effect of a number of opportunity-reducing strategies can create a significantly powerful risk for the potential offender.

Community-Based Opportunity Oriented Crime Prevention: A Typology

Opportunity reduction can operate through both individual and community-level responses, utilizing both physical and social or behavioural strategies. A typology based upon these two variables (individual versus collective level and physical versus social or behavioural strategies) is presented below in Table 2 .

Table 2: Types of Community-Based Opportunity-Oriented Crime Prevention Strategies

Strategies	Level at which Crime Prevention is Applied: Individual	Collective
Physical	Direct and Indirect Target Hardening Locks, Alarms, Property Marking, etc.	Environmental Design Street Lighting Revitalization and Beautification
Behavioural/	Avoidance behaviour Restricting behaviour so as to prevent victimization	Neighbourhood watch Citizen patrolling

It should be pointed out that there is considerable overlap with respect to these distinctions. Individual target hardening or property marking, for example, is often coordinated through community organizations. These strategies are rarely used in isolation and a

comprehensive crime prevention program will generally touch on all four types. However, for the purpose of analysis, such a typology allows us to discuss the relative merits of various aspects of a crime prevention program as well as the drawbacks of using any one to the exclusion of others.

In the next sections, we will review a number of opportunity reducing mechanisms as they operate on the individual and collective levels. Using our typology as a guide, some of the issues with respect to implementing various aspects of a crime prevention program and mobilizing community involvement are considered. This will provide a framework for reviewing some of the theoretical issues and inherent limitations of an integrated community crime prevention effort.

II. A REVIEW OF CRIME PREVENTION STRATEGIES

1. Individual Strategies

1.1 Physical Strategies

Individual physical crime prevention strategies are usually encouraged on a community-wide basis. However, they are considered 'individual' in the sense that they involve methods employed by individuals to reduce their own chances of victimization. The benefits of such programs are largely private in that they are geared to reducing victimization among participants. The collective benefits of such programs (that is, area-wide crime reduction) are in a sense a reflection of the total private benefits. As a result, 'success' is often defined in terms of eliciting high levels of involvement. Such programs may be of little benefit to non-participants, and may even have a negative effect if displacement occurs.

Among the various physical strategies employed, the most direct is target hardening. This includes such precautions as secure door and window locks, stronger doors and door frames, and a variety of security measures designed to make intrusion more difficult and time-consuming.

Target hardening may also include indirect methods. Opportunity can be 'disguised' to make a home appear occupied while the residents are away. Programs like 'operation lights-on' (Rush and Sojha, 1978) encourages residents to use timers which, by creating a pattern of lights switching off and on, create the illusion of occupancy. A simpler method involves leaving a light on while away for an evening. This may prevent those burglaries which occur because a burglar perceives that a home is unoccupied.

Opportunity can also be reduced through burglar alarms or watch dogs. Like methods which increase potential observability, burglar alarms have the effect of alerting others to the presence of an intruder. Similarly, noisy dogs can provide a way of increasing the risk of being noticed during a burglary. The effect of these indirect methods can be further enhanced by displaying warning signs (e.g. 'Premises Protected by Burglar Alarm', 'Beware of Dog') to discourage potential burglars.

Such indirect strategies rest upon the untested assumption that the perceptions of a potential burglar will be affected accordingly. While these schemes may fool or frighten a novice, it is not likely that a seasoned burglar will be intimidated quite as easily. Indirect strategies are normally recommended along with a host of other direct target hardening strategies. Consequently, there appears to be little opportunity for evaluating their particular effectiveness. Perhaps the use

of offender interviews may have some utility in this regard provided that we recognize that interviewing known offenders introduces a sampling bias. Only those who are unskilled, inept, or unlucky enough to be apprehended are included in the sample.

The logic behind direct and indirect target hardening is that by making intrusion more difficult, more time-consuming, and more noticeable, an opportunity will be perceived as presenting too great a risk or requiring too great an effort. If target hardening is completely successful, no opportunity will be perceived at all.

Clarke and Heal (1978) question the usefulness of various means of target hardening. While they may have some merit in stopping an opportunistic burglary, it may be very difficult to resist an accomplished professional. In addition, such precautions can be quite costly, especially since burglary is a low frequency event and the risk of burglary for any given dwelling is not especially high. If burglary rates are high among lower income neighbourhoods, it is unlikely that many residents will have the financial resources to invest in elaborate locks or security, even if they are convinced that such security is needed. Others may be unwilling to invest in security for homes which are rented (Bishop et al, 1979). Furthermore, from a political point of view, target hardening may not be a promising strategy. The private benefit of such security is high, but it is likely that burglary will be displaced to less well-protected homes leaving very little impact on an area-wide crime rate.

From this point of view, target hardening is probably most effective when applied on an area-wide basis through governmental security

regulations for new dwellings or through the provision of security devices at little or no cost to low income families or the elderly.

1.2 Property Marking

One indirect physical strategy which has received considerable attention is that of property marking. Property marking programs involve the use of engravers to permanently identify transportable property. Participants use an identifying number which allows the police to trace the owner. Social insurance numbers or driver's licence numbers are commonly used although some programs use unique numbers. Numbers are filed in a central police registry. In addition to marking their property, participants are issued warning decals which alert the burglar to the fact that items have been marked for police identification. Similar programs exist for commercial establishments, cottages, marinas, and construction sites (Lynch et al, 1977).

The logic of the program is that burglars will perceive a greater risk of being caught in possession of marked as opposed to unmarked items. Secondly, marked items will be more difficult to fence and will thus be perceived as a less desirable target. Finally, once police have recovered goods, they can be more easily identified and returned to the owner. The warning decal serves to discourage intrusion provided that the marking of property does work to increase risk to the burglar. The use of the decal is recommended since property marking alone will not alert the burglar to the fact that the property is marked until the burglar is already inside. Even then, if the markings are inconspicuous (as they usually are--few people want to deface their own property by scratching large numbers on the surfaces which are visible) and the

setting is dark, the burglar may not discover the markings until after the items have been stolen.

Like other direct and indirect target hardening programs, if the benefit of property marking accrues mainly to participants, then collective benefits can only be attained through high levels of involvement. However, involvement in property marking programs is typically quite low (Green et al, 1979; Riopelle et al, 1980). Krajick (1979) reports that "only ten of the 65 projects surveyed by LEAA in 1975 had enrolled more than 10% of the households in their jurisdictions. In addition, very few of those who mark their property display warning decals. With low participation, it is much more likely that displacement from participants to non-participants will occur. Even in areas where high participation is reached (Meuser, 1976) it appears that some 'tactical' displacement may be taking place as evidenced by an increase in thefts from cars, garages, and sheds, and a tendency to steal money or unmarked items such as jewelry or watches. A number of evaluations which report that no displacement has taken place (Meuser, 1976; Zaharchuk and Lynch, 1977) focus on geographic displacement between communities rather than tactical or local displacement from participants to non-participants within communities. The issue of displacement is discussed in greater detail in a later section.

A further difficulty with property marking programs involves the recoverability of marked items. In an evaluation of an identification program in Wisconsin (Riopelle et al, 1980) it was found that engraving had not improved the recoverability of stolen items. Green et al (1979) report that burglars do not have difficulty disposing of marked goods. Furthermore, they commonly steal money or items that are not easily

marked (Krajick, 1979). Hayes et al (1978) argue that if there is any deterrent effect it is more likely due to the presence of a warning sticker and not to the fact that the items have actually been marked. Marked items are less likely to be recovered if they are transported out of the program area, especially if only local records of user numbers are kept. Property is less likely to be recovered if it is kept for private use or sold informally among friends. Finally, if a burglar does steal marked goods and cannot dispose of them profitably, the items are more likely to be destroyed or discarded than returned to the owner.

Some evidence suggests that participants in property-marking programs generally have lower risks of victimization and better attitudes towards household protection than non-participants (White et al, 1975; Hayes et al, 1978). Thus the discovery of lower burglary rates among program participants may be due to a self-selection process. Perhaps the program attracts people who are more conscientious about crime prevention to begin with. It seems likely that people who go to the trouble of marking their household effects will also go to the trouble of having and using secure locks or other crime prevention measures. There are few 'pure' identification programs, as they are normally administered along with other elements of target hardening. Standard community crime prevention programs consisting of a number of integrated elements make assessment of one particular element quite difficult. While we cannot assume that participation in one aspect of an integrated program will insure participation in other aspects, it seems reasonable to hypothesize that involvement in various aspects would represent a cumulative scale rating from relative ease or difficulty of individual effort. If this were true, those who take part in

the property marking aspect of a program would also participate in those elements requiring less effort.

Participants are also more likely to report burglaries to the police (Schneider, 1975; Hayes et al, 1978). The tendency to report may be an extension of the tendency to participate or it may be due to an expectation that, since their property has been marked, it could be identified and recovered. It would not seem logical to go to the trouble to marking items and then not to bother reporting their loss. For whatever reason, it appears that those who participate in property marking programs are more sensitized to the general idea of crime prevention. Co-operation required for engraving property may reinforce this sense of protectiveness and responsibility. In this sense, property marking programs may indirectly contribute to a reduction in victimization.

Another type of self-selection bias which could affect the levels of victimization for participants is that recent victims may be more inclined to become involved in a property marking program. This would have the effect of selecting out a group of participants which has a higher rate of victimization than the general population. Assuming that crime rates are randomly distributed, the participants would have roughly the same risk of victimization as that of the general population. As a result, a reduction in the burglary rate for participants would be expected for reasons of statistical probability alone (a phenomenon which is known as regression to the mean).

1.3 Behavioural Reactions to Crime

Individual behavioural strategies for crime prevention would be better described as behavioural reactions to crime. Much of the crime prevention literature rests, implicitly at least, upon a type of environmental determinism. This assumes that the physical changes will produce concommitant behavioural and attitude changes in both offender and victim. The desired behavioural changes for victims include efforts to increase potential observability by encouraging citizens to be aware of criminal activity and to report such activity to the police. The issue of citizen reporting and intervention is discussed in greater detail in the section dealing with issues relevant to crime prevention strategies in general.

A more common behavioural reaction is that of avoidance and taking precautions (Skogan and Maxfield, 1981). Some precautionary measures are recommended as part of a general crime prevention effort. Personal risks can be avoided by limiting exposure to dangerous places, potentially dangerous situations (e.g. hitchhiking), and restricting certain activities (e.g. jogging) to daylight hours. It must be remembered, however, that avoidance and precaution can become extreme and the quality of life can be negatively affected.

1.4 The Danger of Individual Strategies in Isolation

An overemphasis on individual crime prevention may result in increased fear and isolation. People living behind locked doors can become captives. Isolation and withdrawal resulting from over-reliance on target hardening is counter-productive in terms of crime prevention. "It ignores the role which people can play in co-operation with their neighbours." (Frisbie, 1977:9). Skogan and Maxfield (1981:225) conceptualize the actions which people take to reduce their own chances of

victimization as 'protective' rather than 'preventive' actions. Protective actions are individual, while preventive actions involve the community. Protective action may reduce the risk for the individual while fear of crime continues to paralyze a neighbourhood. The benefits of protective actions are private and somewhat precarious. The key to preventive action lies in the 'community'--something which is more than simply the sum of individual responses to crime. It is through collective effort that the opportunity to accomplish tasks beyond individual abilities is provided.

2. Collective Strategies

Following our typology of individual versus collective (or community) focus and physical versus behavioural (or social) strategies, an attempt is made in this section to discuss crime prevention strategies on the collective level. A collective response to crime is one in which unrelated individuals act jointly to undertake crime prevention activities which individuals could not accomplish on their own. Social strategies include programs which encourage residents to watch over their neighbourhood and report suspicious activities. Public education and awareness campaigns are launched to encourage a sense of citizen concern for the community. Physical strategies include the use of physical design changes to modify the environment such that criminal opportunity is restricted and social control is enhanced. The major thrust in this area has been the CPTED (Crime Prevention Through Environmental Design) concept. The labelling of this approach as a physical strategy is somewhat artificial. The concept involves the use of

physical design changes in concert with social strategies to reduce crime and enhance the quality of life in a community.

2.1 The Community Social Strategies

The most common community strategies are those designed to encourage residents to watch over their neighbourhood and to report crimes or suspicious activity. Program names like 'Neighbourhood Watch', 'Block Watch', or 'Crime Alert' suggest the theme of community responsibility to prevent crime. Neighbourhood groups are organized to increase surveillance through watching each other's homes, patrolling the streets, or disguising opportunity through making homes of vacationing residents appear occupied by collecting the mail, trimming the lawn, or filling the garbage bins. An attempt is made to reduce opportunity in ways in which an individual, acting alone, could not.

Community meetings are held in which residents are presented with target-hardening and property-marking advice which can be used as individual strategies along with community involvement. It is at meetings such as this where the disadvantages of isolated individual protective measures can be overcome. Citizens can also be made aware of the nature of police patrol and investigative limitations and recognize their role in preventing crime. In general, citizens can be educated as to their social responsibilities concerning crime prevention and reporting.

An extension of neighbourhood or block watch programs includes the involvement of citizen-band radio operators to increase the surveillance capacity of a community. Another such program is the 'Letter Carrier Alert' which was initiated in Winnipeg in 1981. This program

encourages those who have contact with the public on a regular basis to be aware of criminal activity and other dangers or emergencies which may arise. Programs such as this have the potential of reducing feelings of isolation and fear as well as increasing the potential observability of criminal acts. Newspaper carriers, meter readers, door-to-door sales persons, and city maintenance and sanitation crews can potentially become involved in such programs.

Generally, the 'watching' component of a crime prevention program is designed to meet operational goals such as "increased reporting of crimes" or "a greater number of burglary-in-progress calls over total calls". The property-marking and target hardening aspects of the program are more directly geared toward the reduction of crime. However, the involvement of a wide variety of community members to increase surveillance and reporting provides a resource which not only augments police surveillance capabilities but also helps to foster a general sense of social responsibility.

As Oscar Newman said (1972:3) "when people begin to protect themselves as individuals and not as a community, the battle against crime is effectively lost". The notion that community responses to crime may be more far-reaching than isolated individual efforts, preventive rather than merely protective, and integrating rather than isolating suggests that the key to a successful crime prevention program lies in tapping this resource, in generating a sense of 'community'.

The effectiveness of the various community crime prevention strategies varies from program to program and from area to area. While regional differences and demographic variables have a great deal to do with the success or failure of a program, the concern in this section is

with the method used to elicit program participation. Methods to promote crime prevention strategies range from more passive to more active approaches (White et al, 1975) as well as according to the type of contact made with the public. Direct personal contact can be made through door-to-door canvassing, semi-personal contact can be made through public meetings, and finally, impersonal contact is made through media efforts.

Methods of promoting crime prevention services vary according to whether crime prevention services are provided (active) or available upon request (passive). For example, in passive property-marking programs, engraving pens may be available to lend to citizens requesting to mark their own goods. In active programs, door-to-door engraving services are offered and involvement is solicited. Similarly, home security inspections can be passive provided only upon request or checklists can be provided for interested parties wishing to conduct their own security inspections. In active programs, police officers or community service officers can solicit requests by conducting door-to-door campaigns and offering on-the-spot security inspections.

Passive programs have only limited effectiveness. More individual effort is required by participants in order to become involved in a more passive program. Thus it is quite likely that such a program will involve those who are already concerned and probably less vulnerable. As we move from a more passive to a more active promotion of crime prevention services, the levels of participation will increase. However, the cost also increases. Furthermore, a number of studies have indicated that increased participation is not always sufficient to warrant the additional cost (Tien et al, 1975; Houser, 1975; Duncan,

1980). Few people fully comply with the recommendations made during the security inspections, and few fully participate in a property-marking program.

An active crime prevention program is likely unwarranted in areas in which crime rates are low and levels of community integration are high. Active programs are generally geared to high crime target areas. Consequently, a passive program may be provided to low crime areas. If an 'active' campaign is warranted, the cost of such programs can be reduced through volunteer services provided by community-minded groups and organizations.

As we might expect, a number of program evaluators have found that personal contact (Mulberg, 1976) or small citizen meetings (Green et al, 1979; Fowler et al, 1979) are much more effective as a method of eliciting program participation than are mass media campaigns, even if the media component of a program is fairly extensive (Houser, 1975).

Normally, media efforts should be used to complement the person contact components of a program (Frisbie, 1979). They are used to reach a large number of people with more generalized information concerning the availability of services and general themes of crime prevention. A media campaign on its own is not a promising strategy. While it may change attitudes (Bickman, 1975), the extent of actual behavioural change is minimal (Clarke, 1978). Dubow et al (1979) point out that behavioural change is inhibited by the fact that crime is generally perceived to be a greater problem for other people. The media message can, in effect, fall upon deaf ears if the message is felt to be inapplicable. For example, an extensive media campaign to reduce thefts from parked vehicles was found to be a wasted effort (Burrows and Heal,

1979) as random checks of parked vehicles revealed no change in vehicle security before and after a very intensive advertising campaign.

Media campaigns, as a strategy on their own, are generally unfruitful because of the lack of specificity and local application. The broad themes presented are insensitive to the varying public perceptions of crime across categories of individuals and across communities. Media campaigns are not equipped to deal with the complex motivational process involved in generating behavioural change (Sacco and Silverman, 1981). While media efforts are useful in transmitting general information to a large number of people, the effort is almost pointless without follow-up at the local levels to provide specific crime prevention activities. It is at these local levels where the specific nature of criminal needs and crime perceptions can provide a clue as to how participation can best be elicited. In integrated types of communities, high participation levels can be gained with relative ease. In others, where barriers of mistrust and withdrawal exist, a more active effort may be required to ensure involvement in community crime prevention efforts.

2.2 Community-Level Physical Strategies: Crime Prevention Through Environmental Design (CPTED)

The majority of physical strategies employed on a community-wide level are integrated into the CPTED concept. While some of the physical design changes, for example, street lighting (Frisbie, 1977) have been employed on their own, these are also a part of the changes introduced by CPTED practitioners. It should also be pointed out that the physical design changes are not meant to be implemented to the exclusion of social strategies, but rather to enhance them. The CPTED concept is one

in which physical design changes and social strategies are used interactively. It is seen here as a physical strategy primarily, since the 'social strategy' is based upon the assumption that behavioural change will follow from the physical design changes.

The CPTED approach to crime prevention is based upon a theoretical link between behaviour and the environment in which that behaviour takes place. The extension of environmental psychology into the field of crime prevention looks at the extent to which criminal opportunity can be enhanced or discouraged by the physical nature of behavioural settings (Engstad, 1975). The notion of designing behavioural settings in such a way as to restrict criminal activity has been suggested by a number of researchers, most notably Jacobs (1961) and Newman (1972). Environmental design concerns interested in the relationship between physical design and the breakdown in traditional social controls.

The CPTED concept involves the use of physical and social strategies designed to reduce crime and the fear of crime. The physical strategies are designed to reduce, restrict, or discourage criminal opportunity based on the logic of target hardening. The environment is designed in such a way as to facilitate its legitimate and constructive use. The social strategies are designed to create a sense of 'territoriality'. Territoriality refers to a sense of ownership and responsibility on the part of residents for their own living environment (Stanley, 1977). A sense of territoriality corresponds with a concern among residents for maintaining social control in their own environment. Once a sense of territoriality is achieved it becomes possible to create a "sufficient amount of community to bring back the kind of social

controls which, in more integrated communities, are such a powerful deterrent to crime". (Stanley, 1977:15).

These physical and social strategies are centered around four inter-related concepts:

- access control,
- surveillance,
- activity support,
- motivation reinforcement (Bickman et al, 1978).

Access control involves strategies to reduce criminal opportunity by keeping potential intruders out of the area. The strategy consists of various security measures from more secure locks to street designs which make access into a neighbourhood or housing complex more difficult. Frisbie (1977) reports that street layout can be effective in reducing criminal opportunity since criminals prefer to select targets which are convenient for both access and departure. The construction of bays or cul-de-sacs in housing complexes (Newman, 1972) makes access more difficult for potential intruders. Access control may be disadvantageous, however, in terms of making legitimate activity such as police patrol, emergency services, or city services more difficult (Fowler et al, 1979). In other cases, residents or business persons may oppose the physical design changes because of the added inconvenience they create (Bickman et al, 1978).

In addition to 'real' physical barriers, physical design changes include the construction of 'symbolic' barriers such as low fences, hedges, or marked off areas. These symbolic barriers are complemented by social barriers, the social strategy of access control. Social

barriers are a territorial response to protect the physically defined areas by recognizing or even questioning strangers.

Surveillance refers to the design of the environment in such a way that criminal activity is likely to be noticed. Physical design strategies such as lighting or window location encourage natural surveillance by making it easier for residents to see what is going on in their environment. More formal surveillance equipment such as cameras and monitoring devices have also been employed in large apartment complexes.

Frisbie (1977) reports that the fear of crime as well as the incidence of certain crimes is related to darkness. Poorly-lit streets offer places of concealment for burglars, rapists or robbers. In addition, poor lighting makes surveillance difficult for police and concerned citizens. A number of studies (reported by Frisbie, 1977:-236-237) demonstrated reductions in crime due to improved street lighting though other studies have not shown such effects. At any rate, Frisbie cautions that lighting cannot be viewed as a sole solution to crime. The effectiveness of improved lighting depends upon the extent to which it is introduced as part of an integrated crime prevention effort. Used alone, criminal activity may simply be displaced to less well-lit areas.

One of the difficulties in increasing the surveillance capabilities of residents is that other aspects of environmental design, such as the construction of physical barriers which help to create a more clearly defined area or the placement of shrubbery to create a less institutionalized appearance, can provide places of concealment and restrict visibility. Consequently, access control may create problems in surveillance design.

The social strategy concommitment with surveillance design is to encourage reporting or intervention when a crime is observed. Surveillance design is intended to increase the possibility of noticing a crime. However, intervention or reporting of crime is not an automatic response to observing a crime take place. This is an issue which affects all community crime prevention programs designed to increase reporting of crimes and is discussed in a separate section.

Activity support refers to the effective and legitimate use of the environment. Physical strategies include the design of recreational facilities and maintenance of the environment in ways that encourage constructive use. Wilson and Kelling (1982) argue that if a neighbourhood is allowed to deteriorate through disrepair, an uncaring attitude about the neighbourhood develops. This precipitates further disrepair and vulnerability to criminal invasion. The social strategy of activity support involves that of fostering a positive concern for the use of the environment. Legitimate use of the environment in itself discourages criminal activity.

Motivation reinforcement refers to the development of a sense of belonging to the environment. Physical strategies include revitalization and beautification efforts to neutralize the negative image of isolation and vulnerability among residents in high crime areas. In public housing complexes, building design and landscaping can reduce the institutional appearance of the housing project and create a more personalized, decentralized environment. Social strategies involve efforts to increase territoriality by allowing individual residents to feel responsible for the total environment rather than simply their own dwelling. Newman (1972) noted that residents living in housing

developments often feel that their protective responsibility begins and ends with the boundaries of their own apartment unit. Consequently halls, entrance ways, stair well, and elevators become a type of 'no-man's land' where criminal predations can go on unchecked. Physical changes are designed to designate these areas as semi-private areas. Multiple entrance ways can be constructed for the use of a smaller number of residents. These entrances can be marked out in such a way that they constitute a restricted area. Units can be clustered so that their doorways open onto a shared yard. These semi-private areas can then come under the proprietary care of the residents.

In delineating these four concepts,it should not be forgotten that these are inter-related. An analytical separation such as the one above should not be misinterpreted as an indication that these concepts operate independently or in isolation. Together these four concepts, access control, surveillance, activity support, and motivation reinforcement, make up what Newman (1972:3) refers to as defensible space, that is:

> The physical expression of a social fabric that defends itself ....All of these different elements which combine to create a defensible space have a common goal - an environment in which latent territoriality and a sense of community in the inhabitants can be translated into responsibility for ensuring a safe, productive, and well-maintained living space. The potential criminal perceives such a space as controlled by its residents, leaving him as an intruder easily recognized and dealt with.

It can be seen that defensible space is quite different from an elaborate security system. The goal of defensible space is not to create a fortress. Rather, the environment must be opened up and used in legitimate ways which encourage social control and self-policing.

In addition to recognizing that the four concepts outlined above operate interactively, it should also be clear that the physical design changes are ineffective without social change as well. Freedman (1975) argues that when people feel cut off, powerless, and afraid, physical design changes will have a minimal effect on willingness or ability to control crime in their environment. While Newman's approach relies more heavily upon physical design strategies than on social change--under the assumption that social changes will be concommitant with the physical design changes--the CPTED approach has tried to pay close attention to social strategies as well.

The attempt to foster a sense of community has been one of the major themes of the CPTED program. However, social changes are much more complex and less manipulable than physical design changes. Attitudinal and behavioural change is a much more difficult program to define or to rigorously apply meaningful solutions.

CPTED is a useful concept if applied with reasonable caution. It has the potential of reducing both the incidence and fear of crime. Some of the problems specifically associated with CPTED were discussed in this section. Some of the limitations of CPTED are theoretical problems which affect the field of crime prevention generally and are discussed in the following section.

III. THEORETICAL PROBLEMS AND INHERENT LIMITATIONS OF CRIME PREVENTION

1. Correlates of Community Involvement

One of the key theoretical problems in community crime prevention programs involves the nature of community involvement itself. Involvement in community crime prevention appears to be most strongly related

to 'investment' in the community rather than actual victimization or crime fear. Skogan and Maxfield (1981) found that home ownership and long-term residence in a community are closely correlated with anti-crime activity. They report that "persons who were most closely tied to the local social system were more likely to do things to protect their homes. Neighbourhood ties were strongly related to surveillance effect, and were the best (and only significant) predictor of property marking." (1981:221). Lewis and Salem (1981) point out that crime prevention programs are most effective--in terms of gaining participants--when adopted by pre-existing community organizations. Thus, the community which has already achieved a high level of organization may be more likely to launch a 'successful' crime prevention program ('success' referring here to high levels of program participation). Participation in these programs, they argue, is not so much a function of crime concern as it is a function of involvement in general community concerns.

There is some irony in the fact that citizen involvement is highest in highly integrated neighbourhoods, since these are the areas where fear and crime are usually lower. If, as Skogan and Maxfield (1981:223) argue "an economic and social model of household protection provides a better explanation of how people react to property crime than does an 'environmental threat' or 'concern about victimization' approach to the problem", then community-oriented crime prevention programs have greater success with the least vulnerable. Crime and fear of crime is higher in communities lacking in integration and social control while at the same time eliciting participation in crime prevention activities is more

difficult. Thus, the solution appears to work best for those who need it the least.

This problem of a lack of social control, low integration, and feelings of isolation in high crime areas has been one of the central concerns for the CPTED program designers. An attempt is made to create an atmosphere in which residents can have a greater sense of cohesion and proprietary concern over their environment. Rouse and Rubenstein (1978, Vol. II:21) note:

> The anti-crime program should be designed not only to reduce criminal opportunities, but also to enhance the feeling of security among residents. Promotion of social cohesion and interaction should be stimulated by a variety of strategies all designed to promote neighbor helping neighbor.

The theoretical problem with the goal of developing a sense of 'community' where none exists as a prerequisite for social control has been examined by Lewis (1979). Lewis argues that when a community can respond collectively, crime can integrate society by affirming central values. On the other hand, when responses are individualized, crime disintegrates by producing fear and distrust. The logical response is for the government to "increase the capacity to respond collectively to crime". The problem with this policy is that it fails to explain why communities would respond collectively rather than individually to crime. Historically, as Rouse and Rubenstein (1978, Vol. I:55) point out:

> residents of public housing have not viewed interaction as very sensible. As members of a subculture cut off from the larger society, dominated by poverty, living with great distrust and lack of knowledge of their fellow public housing residents, they perceive 'social interaction' as potentially threatening to their survival.

The logical question which follows is one of how collective responses can be created when the very mechanism for creating them is itself crippled by the problem. Lewis (1979:176) asks:

> If crime isolates people and makes them distrustful of their neighbours, how can they be united in a common effort to reduce victimization? If cohesiveness does not exist, how can a collective response create it!

The theory of causality implied in community crime prevention programs is in grave danger. Both the problem and the solution are defined in terms of 'community'. Lewis points out that 'community' is a context in which collective responses take place, not a consequence which can be manipulated through implementation of a collective response.

The way out of this dilemma lies in the search for a common explanation of both crime and isolation. Lewis and Salem (1981) argue that both crime and isolation are related to the breakdown in traditional social controls through changes which take place in the environment which are beyond the control of residents. The leverage for responding to these threats to the moral order is found in increasing the social control capacity of local institutions.

One of the problems of governmental bureaucratic attempts to engineer 'community' is that the two are somewhat antithetical. Nelson (1976) feels that community is undermined by the fact that 'help' and 'care' has become institutionalized, impersonal, budgeted, and controlled to the point that people begin to feel like objects to be manipulated. This is what he refers to as a 'drift...toward treating human beings and human situations as technical problems to be solved by engineered solutions." This results in a relationship between citizens and experts where citizens expect the experts to provide cures. The

community is left in a situation of relative irresponsibility, the individual in a situation of dependency. Thus, a sense that the mechanisms of social control are out of the hands of the citizens can create an increased sense of uncertainty in the social environment. This in turn represents a threat to the moral order.

Crime prevention programs can increase the social control capacity of local, decentralized community institutions. In this way collective responses through local institutions can provide a basis for social control mechanisms which are not out of reach of the community member.

2. Citizen Reporting and Intervention

A second issue concerning community-based crime prevention programs such as neighbourhood watch or CPTED concerns observing and reporting crimes. A program designed to encourage surveillance and facilitate observability often includes an increase in crime in progress calls reported. The ability to notice crimes occurring can be enhanced by physical strategies such as street lighting which increase potential observability. It would be naive, however, to assume that physical changes alone could be sufficient to overcome the inhibitions involved in interpreting and reporting a crime.

Firstly, the event in question must be interpreted as a crime. It is unlikely that a person may want to report something 'suspicious' if they are unsure whether any crime is actually taking place, or if they are unable to provide any concrete details or descriptions to the police. Defining the situation as a crime can be an extremely subjective matter. As Courtis (1980) points out, "ultimately the crime phenomenon is rooted in the subjective evaluations which individuals make of the behaviour of others". Skogan (1976:65) remarks that an

incident recalled as an 'argument', 'quarrel', or a 'fight' has different meaning from one recalled as an 'assault' or a 'threat', even if the observable physical facts are the same.

Secondly, once an event is interpreted as a crime, the issue of reporting or intervening is raised. Victimization surveys have found that the primary determinant of most crime reporting is the seriousness of the offence. However, reporting behaviour varies with crimes on the same level of seriousness due to a number of other factors:

1) Reporting is affected by the extent to which the observer identifies with the victim or property in question (Newman, 1972). That is, reporting is increased according to the degree to which the observer feels personally affected by the crime. Those with a greater investment in the community are more likely to have developed territorial or proprietary attitudes which encourage reporting. A program designed to encourage reporting by citizens will have to be sensitive to the degree of social integration and attachment which exists in a community. It may be necessary to take one step back and deal with isolation and withdrawal by fostering a stronger sense of belonging to the community before a successful crime reporting campaign can be launched.

2) Reporting can be encouraged or discouraged by the nature of social support attendant to the event (Bickman and Rosenbaum, 1977). The presence of other witnesses is important not only in defining the event, but also in defining the appropriate action to be taken.

3) Reporting is affected by attitudes toward the police. Reporting is encouraged or discouraged according to the extent to which the observer feels that the police will be able to do something about the crime (Hayes et al, 1978) or will be able to catch the offender

(Schneider, 1976). Programs designed to encourage reporting may be misdirected if non-reporting is actually a result of police ineffectiveness or unhealthy attitudes towards the police rather than of citizen apathy.

4) Reporting is affected by the degree to which the crime is perceived to have been committed by a stranger (Schneider, 1976). People are less willing to have friends (or children of friends) or relatives involved with the police. Crimes committed by friends or relatives can often be dealt with directly rather than involving the police. In these cases, the police may be contacted if the observer or victim feels that such action will help the offender in a meaningful way.

5) Fear of retaliation is often a strong deterrent to reporting (Newman, 1972). A number of programs encourage reporting by assuring anonymity or protection to victims or witnesses. Vardalis (1979), for example, describes a 'crime alert' program in which participants who have signed a pledge card are issued a number. This number is known only to the Chief and authorized members of the crime prevention unit. A participant reporting the crime gives only the number to the officer handling the call. In this way, the assurance of anonymity is an added incentive to reporting since it helps reduce the fear of retaliation. It should be pointed out, however, that this type of strategy can only be expected to work in situations in which observing the crime did not involve a personal confrontation with the offender. If the offender knows that the crime was observed, direct threats can be issued at the time in order to silence the witness. The observer is less likely to report the crime even if the police promise anonymity if it appears that

the offender is likely to know or discover the identity of the observer by other means.

Programs which are designed to encourage citizen reporting, then, should be sensitive to these factors. A block watch program, for example, will not be as effective if distrust or lack of confidence in the police prevails or if the danger of retaliation cannot be minimized. Reporting will be minimized in neighbourhoods characterized by low territorial attachment. In other words, the rate of reporting will not automatically increase simply through methods of increasing the capacity to notice crimes. In addition, it should be recognized that certain crimes are easier to notice and easier to interpret than others. An analysis of the type of crimes, location, offenders (strangers opposed to relatives or friends), as well as the attitudes toward the police and the community should precede launching of a campaign to increase reporting behaviour.

3. The Consistency Between Crime and Fear

The objective of most crime prevention programs is to effect a reduction in both the incidence and fear of crime. One of the issues, then, associated with crime prevention programs involves the extent to which these two dependent variables can be influenced in the same direction by a crime prevention program. Does a reduction in crime rates automatically signal a concommitant reduction in the fear of crime?

In fact, crime and fear rates may vary independently. Hayes et al (1978:117) in an evaluation of the Dayton Valley neighbourhood project found that:

> Victimization did not decrease even though citizens felt it had. Actually, crime increased during the period that citizens were the most likely to say that crime had decreased and decreased during the period at the end of the experiment when citizens were most likely to say that crime was increasing.

Fear, as a perception of the nature of crime and crime rates can be informed by a number of factors other than the official reports or scientific assessments of the actual crime rate. News media information sources tend to be slanted towards 'newsworthy' stories of particularly colourful or sensational crimes, crimes involving celebrities as victims or offenders, or crimes of violence (Skogan and Maxfield, 1981). Other sources of information about the nature of crime involve television dramatization, movies with crime themes, or informal exchanges as a part of neighbourhood interactions. All of these potentially misleading sources of information help to create interpretations about the nature of crime which may be far removed from reality. It is these interpretations upon which perceptions like fear are based.

Furthermore, fear of crime varies across categories of individuals and this variation does not accurately represent the distribution of victimization across those categories. Skogan and Maxfield (1981) report that the fear of crime is more common among women and the elderly even though they experience lower rates of victimization. The reason for this fear lies in their increased sense of vulnerability, a feeling that they are less capable of protecting themselves than others. The reason for the lower victimization rate lies in the tendency for fear of crime to prevent them from venturing out as often where they will be vulnerable, and to motivate them to take more extreme precautions. In a study of victimization among the elderly, Bishop et al (1979) found that publicizing crime information and emphasizing the need for individual

preventive action had the effect of raising, rather than reducing, fear among the elderly. They found that the program had been successful in encouraging the use of protective measures among the elderly. However, the program had not been successful in strengthening neighbourhood bonds.

Our discussion of the correlates of involvement in community crime prevention programs pointed out that investment in the community (Skogan and Maxfield, 1981) and social integration (Lewis and Salem, 1981) are more important determinants of involvement than are levels of crime fear or actual crime rates. This implies that a distinction should be made between a crippling fear and a 'concern' for crime which motivates people to become effectively involved in its prevention. Dubow et al (1979) argue that perceptions of crime need to be clearly distinguished between different reactions to crime, of which fear is one. Fear is a reaction which involves the emotions; other reactions involve values, assessment about the importance of crime as a public issue; or judgments, more objective perceptions of crime rates and crime risks. It is possible that a number of victimization surveys are insensitive to these distinctions in their indicators of 'fear'. Thus, a distinction between fear and other forms of 'concern' should be specified before outlining a strategy to combat fear.

A general goal of crime prevention programs might be to reduce fear but at the same time increase concern. Both of these goals, the reduction of isolated individual fear and the education to concerned involvement, can be sought through placing the mechanisms of social control into the hands of the citizens. This goal can be accomplished

through increasing the social control capacity of local institutions to respond to crime as a community problem (Lewis and Salem, 1981).

4. Crime as a Function of Opportunity

The community crime prevention model operates under the assumption that much of criminal activity is opportunistic. Given that citizen crime prevention programs focus on opportunity rather than motivation, they cannot guarantee the prevention of crime in an absolute sense. The success of these programs depends upon the way motivation and opportunity are related. To the extent that motivation to commit a crime is a function of opportunity presenting itself, crime prevention programs will be more successful. Where the causal order is reversed, that is, if opportunity is created or sought as a consequence of motivation to commit crimes, opportunity-oriented crime prevention programs will not be as successful. If motivation is stronger, it follows that criminal activity will adapt and change in ways to meet this new challenge. This adaptation is referred to as 'displacement' and is discussed in some detail below.

A second limitation of opportunity-oriented crime prevention programs concerns the subclass of criminal activity which is amenable to such preventive efforts (Angel, 1968). Not all crimes can be prevented. Prevention programs can only be directed at those crimes which depend upon opportunity rather than passion or careful deliberation.

A third limitation involves the extent to which opportunities can be reduced. This involves an assessment of police, citizen, and environmental responsibility for creating or failing to limit criminal

opportunities and the extent to which the agencies responsible are capable of reducing these opportunities (Engstad and Evans, 1980).

At this point, it appears that opportunity is a significant factor in many types of crimes (Stanley, 1977). Cirel et al (1977) report that a substantial proportion of burglaries in Seattle were committed by youthful offenders who capitalized on available opportunities. The growing body of research and planning in the area of crime prevention is demonstrating that much of that opportunity can be reduced through private, community, police and governmental actions.

However, these limitations suggest that any effective crime prevention program requires an assessment of those factors in the environment which are conducive to crime occurrence. This involves not only research concerning how specific crimes are carried out (i.e., what opportunities must be present), but also concerning how resources can be mobilized at various levels of responsibility in order to prevent certain crimes.

5. Crime Displacement

Closely related to the issue of opportunity is the question of crime displacement. If crime prevention makes opportunity difficult under one circumstance, it is possible that criminal activity will be displaced to more favourable circumstances. Displacement depends upon the degree to which determination, skill, and planning are required to commit an offence and the degree to which they are circumscribed by opportunity. Clarke and Heal (1978, 82-83) illustrate this point.

> It is likely that offences such as vandalism and shoplifting, which may be heavily dependent upon the temptations and opportunities of the situations in which offenders find themselves, could be cut by protecting individual targets. The

> rates of other offences such as car theft and residential burglary which depend to some extent on opportunities, but opportunities which have to be sought out, may not be so easily reduced by protecting particular targets, even though the targets that are given protection may themselves escape attack. The reason is that within easy reach of every home with a burglar alarm or car with an anti-theft device, there are many others without this form of protection. For crimes such as bank robbery which are by and large the province of professional criminals, protection of a particular bank will almost certainly displace attention to another.

Reppetto (1976) outlines five possible types of displacement: temporal (committing the same offence at more convenient times), tactical (altering tactics to commit the same crime), target (switching to an easier target within areas), territorial (committing similar crimes in a different geographical area), and functional (switching from one crime type to another).

Temporal displacement would be a more serious problem for programs which emphasize augmented police patrolling during certain times of day or programs which impose juvenile curfews. For example, a juvenile curfew imposed in Detroit (Hunt and Werner, 1977) revealed evidence of displacement to different hours of the day.

Tactical displacement refers to attempts on the part of the offender to adapt to a more difficult environment by changing methods. Potentially, tactical displacement may be the most serious type of displacement since it may involve a change to more aggressive, violent or armed techniques (Stanley, 1977). Rush and Sojha (1978) noted that burglars appeared to have switched to more sophisticated techniques in response to citizen crime prevention techniques in the Simi Valley, anti-burglary project. A hardened environment requires greater skill and planning to penetrate. Other evidence suggests that burglars may respond to property marking programs by stealing cash or unmarked

jewelry rather than marked goods. This appeared to be the case in a property marking program reported by Meuser (1976). However, no evidence of this type of displacement was found by Gabor (1981) in a study specifically designed to test displacement effects.

Gabor did find evidence of target displacement in the property marking program. Criminal activity was shifted from participating to non-participating households. It appears from other research (McCarthy, 1973; Matthews, 1977) that if target displacement is occurring, it is to households further removed from the immediate neighbours of participants. Another form of target displacement may involve the transfer from residential to commercial (or from commercial to residential, depending on the focus of the program) burglary targets. While Gabor (1981) found no evidence of a change from residential to commercial victimizations, the possibility of this form of displacement should be considered and measured for programs concentrating on one form of burglary in preference to another. It is also possible that hardening residences may lead to a target displacement to garages or sheds (Riopelle et al, 1980). Evaluation should allow for measures which are sensitive to these displacement possibilities as well.

Territorial displacement refers to displacement outside of a target area. This is the most common type of displacement for community-wide programs concentrating efforts in experimental or target areas, especially if participation levels are high. While evidence that geographic displacement in some saturation patrol and target area citizen-based programs appears to have taken place (Newton, 1978), such evidence was not found in others (Jones, 1982). It is important that program evaluators measure for geographic displacement since it is likely that

geographic displacement depends, not upon the type of program implemented, but upon the type of area in which it is implemented. The extent of geographical displacement will be affected by how mobile the offenders are in a given area as well as how accessible other areas may be. Programs in locations cut off from other areas geographically would be less likely to produce geographic displacement than would programs located in larger cities where areas not involved in the program are more easily accessible.

Finally, functional displacement involves the displacement of crime types. This is the least likely form of displacement since it rests on the "rather uncredited assumption that criminals have a generalized propensity for criminal behaviour" (Clarke and Heal, 1978). Wormeli and Kolodney (1972) argue that criminals have a preference for certain types of crimes and that grouping criminals according to specific crime types does produce relatively homogenous groups. Reppetto (1976) argues that a particular mode of theft is based upon the offender's personality and is unlikely to change. If burglars, for example, are prevented from burglarizing, it is unlikely that they will turn to robbery since they have a tendency to avoid confrontations with victims. However, recent research on criminal careers has suggested that offenders are less likely to specialize than these studies suggest.

Repetto argues that crime displacement potential is limited for two reasons. Firstly, displacement assumes that the offender population is totally deterministic and inelastic. Secondly, displacement assumes that offenders "possess total mobility in regard to crime, time, target and area" (1976:70). It should, however, be clear that some offenders are mobile with respect to some or even all of these displacement

potentials. Obviously, the argument is not that crime prevention efforts will have no effect, but rather that some displacement is likely to occur and can have an impact upon the success of crime prevention efforts. Reppetto argues that the types of programs least subject to displacement effects would probably be those based on large areas rather than on individual targets in locations where the chief offenders are young and the ratio of crimes of opportunity such as burglary and robbery are high.

Crime prevention programs in which attempts are made to encourage participation in crime prevention services within a given area are most likely to experience displacement from participants to non-participants. It has been found that the 'private' benefit of such crime prevention programs outweighs the 'collective' (area-wide) benefits (Schneider, 1975; Matthews, 1977). Non-participants suffer by virtue of the fact that a crime prevention program increases their proportion of the total burglaries committed during the program period. In other words, the program has the effect of altering crime patterns in favor of participants (as well as preventing some crime in an absolute sense). While the overall program effect may include a reduction in the rate of burglaries for non-participants as well, the fact that they experience a disproportionate share of the burglaries demonstrates that the program has had an effect on crime patterns and that criminal activity has been altered.

The displacement argument does not assume that all crime will be displaced. It is not an attempt to argue that crime prevention programs

are of no worth. The argument is simply that some crime is likely to be displaced and this displacement should be measured and controlled. Evidence of displacement is not necessarily an indication of program failure. Even with displacement there may still be a net reduction in crime. Furthermore, the fact that displacement has occurred demonstrates that crime prevention strategies can change crime patterns (National Crime Prevention Institute, 1978). Programs can then be modified to impact the displaced crime. Thus, it is important for programs to include mechanisms for evaluating the net crime reduction by measuring the different types of possible displacement effects.

These issues have been raised in order to make the reader aware of the need to apply crime prevention strategies with caution. Recognition of the limitations inherent in crime prevention programs will avoid unrealistic expectations.

In the following section, the question of 'what works' in crime prevention is addressed. It is advised that programs be implemented which accurately reflect the particular crime prevention needs of a community.

IV. DETERMINING WHAT WORKS IN CRIME PREVENTION?

It should be clear at this point that the question of 'what works' in crime prevention is far too general. There are no canned strategies which can be universally applied and expected to work in every situation. It is likely that the major reason for program failure lies in what Stanley (1977) calls a 'cook book application' of these methods. Strategies are applied with little recognition of their limitations.

Crime prevention programs often are not suited to the needs of those particular situations in which they are applied.

This misapplication can take on a variety of forms. Programs can be weakened by attempting to accomplish too much with a variety of strategies when the financial or human resources are limited (Frisbie, 1980). Programs can be focused on the wrong problems. Finally, crime prevention can be treated as a 'grab-bag' for any non-traditional police or community relations work. In addition, programs often lack the evaluative mechanisms which provide information as to whether the programs are making any impact upon crime. In this way, misapplication can continue because progress is not monitored or properly evaluated.

1. The Need for Crime Analysis

Frisbie (1980) points out that one problem for crime prevention effort has been a lack of impact due to spreading resources too thin and trying to deal with a wide variety of crime problems through scattered strategies. Hayes et al (1978) found that the Dalton Village project was difficult to evaluate due to a large number of activities introduced in a short period of time. This makes it difficult to determine the effectiveness of the project and which activities or combinations of activities could be specified as being successful crime reduction strategies.

An undifferentiated application or transplant of a program is a poor investment of crime prevention resources. Replication of a program which has been successful elsewhere requires that the designers of the new program be sensitive to those factors which limit replication.

Flexibility is required to modify the program to meet needs which have been identified as unique to their own situation. In recommending replication of the highly successful Seattle community crime prevention program, Cirel et al (1977) advise that planners consider the extent to which the replication site is similar to that of the Seattle program. The following variables are considered: the type of burglar (Seattle's program was focused upon amateur, local youthful burglars), the type of housing (success was best demonstrated with single family units), population density, residential turnover, community homogeneity, and competition with other programs. A comparison of those factors with one's particular situation will help to determine which programs or aspects of programs can be fruitfully replicated.

The need to avoid scattered efforts by focusing on an identified problem suggests the importance of crime analysis. Crime analysis is an indispensible tool in identifying a program's policies and goals and enabling crime prevention practitioners to set priorities and focus upon certain target crimes and target areas. This requires a detailed understanding of the nature of offences, offenders, victims, police, and the environment in which criminal activity takes place.

In addition to those factors outlined by Cirel et al (1977) above, a number of other variables should be considered prior to replication or implementation of a program. For example, geographic and climatic variables should be considered. The extent to which a community is isolated from others may have important implications for program success or displacement effects.

Differences in ethnic composition has also been found to affect the success of a program. Robinson (1977) found that certain ethnic groups

were reluctant to participate in programs. This was partially due to a fear of police contact and partially due to the 'enclosed' nature of some ethnic groups. They tend to perceive crime in their community as an internal problem which they can handle on their own. In these cases, crime prevention programs will require liaison with leaders in the ethnic community, literature in the language of the client, and a more flexible decentralized program structure which places greater responsibility and control in the hands of the ethnic community.

Communities also differ according to the resources which are available for crime prevention programs. For example, if community crime prevention programs work best with pre-existing organizations in the community (Lewis and Salem, 1981), an attempt must be made to determine how those resources can be mobilized effectively to reduce specific crimes. Thus, crime analysis involves not only a consideration of the specific conditions which generate criminal opportunity in a given environment, but also the resources at various levels which can be brought to bear upon the problem (Engstad and Evans, 1980).

The question of 'what works' in crime prevention can only be addressed in response to a comprehensive crime analysis. Unfortunately, as Frisbie (1977:5) remarks:

> Many crime prevention programs at the local level have operated on a fragmented basis. Rarely have communities put together a comprehensive crime prevention program which focuses on a clearly defined target area and which uses more than one or two crime prevention strategies in combination. Similarly, local crime prevention efforts usually focus on the role of law enforcement agencies to the exclusion of other relevant city agencies such as city planning, inspections, public works, and housing department.

The key issue is one of identifying both the problem and resources for each individual situation. The extent to which particular

strategies 'work' depends, not so much on the elements of the program, but upon the consistency between strategies and the location in which they are implemented.

2. Commitment to Crime Prevention

A further issue related to crime prevention programs involves the kind of priority which crime prevention itself is accorded. Robinson (1977) feels that a number of crime prevention programs suffer because crime prevention units become merely units which carry out all sorts of non-traditional police work. This leads to further fragmentation of efforts which affects the utility of crime prevention in demonstrating any solid impact on crime in the community. Robinson feels that both crime prevention personnel and police management lack a clear description of what constitutes crime prevention work. Consequently, a variety of community relations assignments are also allocated to the crime prevention unit and the hope of any integrated crime prevention effort seems to become diffused into public relations errands.

In addition, the lack of firm commitment to crime prevention by police management and the insecurity wrought by precarious governmental funding policies makes involvement in crime prevention a poor career choice for police officers. This is often reflected in a lack of competent personnel (Robinson, 1977) although the lack of specific training in crime prevention also contributes to the quality of personnel. Community Service Officers (CSO's) have been employed in the U.S. to work in the area of community crime prevention, but this can have the effect of disengaging crime prevention activities from 'real' police work in the minds of all the parties concerned. Green and Pennell

(1979) found that the instability of crime prevention programs and the misconceptions concerning crime prevention (as 'second class' not 'real' police work, etc.) led to low commitment among community service officers. It was felt by many to be a good career move only insofar as it might assist them in securing a position as a fully-sworn police officer in the future.

This suggests that crime prevention programs must include clearly defined areas of responsibility. Job descriptions should distinguish crime prevention from community relations work and other areas of police work which, because they may be difficult to classify, become thrust upon crime prevention units. A firm commitment along with stable funding should be provided in order that crime prevention programs can be given the opportunity and time required to progress and achieve their objectives.

3. Evaluation of Crime Prevention Programs

The requirement for assessing 'what works' in crime prevention involves program evaluation. Unfortunately, many programs lack the mechanisms for providing useful evaluations since the evaluation is often conducted after-the-fact rather than as a monitoring aspect built into the very design of the program. As Tien et al (1975) points out:

> Ideally, the design of evaluation should be an integral part of program development. Program goals and corresponding evaluation measures should be specified along with program design, prior to its implementation. The evaluation measures are then collected and analysed during the course of the program and used not only to document the program's impact but also to monitor and control its progress.

Two points should be made concerning evaluations. Firstly, evaluations should be made on the basis of hard data. Often the 'evaluation' could be more accurately described as an 'activity count' (Krajick, 1979) which reports the number of meetings held, the number of times an engraver was loaned, the number of display booths set up in shopping centres, and so on--without any indication as to whether all of this activity was useful to any extent in reducing crime and the fear of crime. These activity counts are recited as if their successful implementation automatically reduces crime.

Perhaps these process evaluations may be useful for providing ideas as to how certain strategies can best be implemented or which methods of eliciting participation are more effective for those who are in the design and planning stages of a program. However, as White et al (1975:12) remark :

> Little solid proof exists that specific programs reduce burglary rates. Moreover, programs and conditions vary so greatly that generalized conclusions are risky. For these reasons, it is essential that local burglary prevention programs include a planning and evaluation component.

Not only does evaluation as a part of the program design allow the program to be monitored and controlled, but it also introduces an element of accountability into the program. If a program is in progress with no 'threat' that the elements of the program will be evaluated in terms of the impact made upon crime rates, then the crime prevention activity can become its own end rather than a means to achieving the ultimate goal of crime prevention.

The second point concerning evaluations is that the nature of the evaluation should be such that cause and effect can be demonstrated. A change in the crime rate does not automatically mean that the change was caused by the program effects. The extent to which the program can be

said to have 'caused' a change in crime rates depends upon a number of factors. These include:

1. a reliable indicators of crime rates (the use of appropriate data),
2. the control or measurement of extraneous variables (other effects which may also contribute toward a change in crime rates),
3. a level of program participation which is high enough to have made the type of change upon the target area which was observed,
4. a control area which provides a valid comparison,
5. and a measurement of the extent to which displacement may have taken place.

A number of researchers have pointed out the problems of using data based upon official crimes known to the police as a basis for evaluating program effects (Schneider, 1975, 1976). In order for crimes to become a part of the official crime rate, they must not only be discovered and reported but they must go through the additional filters of police discretionary recording and classification (Bottomly and Coleman, 1980). Not all crimes reported to the police are recorded for official purposes. Not all crimes are classified as the same type of crime reported by the victim.

While citizen reporting patterns may vary for a number of reasons, in general, about 50% of actual crimes committed become officially 'known' to the police (Riopelle et al, 1980). Since a common outcome of many crime prevention programs is to increase reporting rates, evaluations based on official statistics may produce misleading results.

That is, if more crimes are discovered, either due to improved police methods or increased citizen reporting, a statistical crime wave may take place on the basis of official statistics even though the actual number of crimes committed may be stable or decreasing.

For these reasons, victimization surveys are recommended. Victimization surveys allow the researcher to measure the impact of the program upon the actual number of crimes committed. In this way they provide a more reliable indicator of the total crime problem than do official statistics. They can be used to measure the extent of participation in crime prevention programs (Evans and Leger, 1980) and can thus assist evaluation by noting whether participation was extensive enough to account for observed changes. Victimization surveys can also be used to measure more accurately the extent to which displacement may have taken place, especially in programs where participants are more likely than non-participants to report crimes to the police (Schneider, 1976).

These surveys can be extremely costly. Crime is a relatively low frequency event and fairly large surveys are required in order to obtain a reliable picture of victimization rates. With this in mind, it may be wise to consider some of the limitations to victimization surveys.

Firstly, certain crimes may not be reported even by victimization surveys. These include crimes of extortion or blackmail, crimes against morality (such as gambling or prostitution) where the offender is his/her own victim, crimes which include victimizations by friends or relatives (such as family violence), confidence crimes where the victim is unaware of being victimized, and homicides. In these cases the victim is unable or unwilling to report victimizations to interviewers.

However, this is not a serious problem, since the focus of most crime prevention programs involves those types of crimes which are amenable to prevention strategies. Crime such as burglary, street robbery, assault and rape (except where they may involve relatives or close friends) are more likely to be reported in a victimization survey. The estimate of actual crimes is limited to victimizations against local residents and does not provide information concerning crimes against commuters or tourists.

The real difficulty, however, lies in the realization that crimes reported in victimization surveys are subject to individual interpretation (Courtis, 1980) and reinterpretation (when asked to recall events of the past). The definition of a certain event as a crime is left to the subjective evaluation of the respondent in a victimization survey. Crimes reported tc the police have the added benefit of police and Crown definitions. Unreported incidents, such as those which victimization surveys are designed to measure, are never afforded the benefit of legal definition. Therefore, a comparison of reported and unreported crimes is a comparison of legally defined and subjectively perceived events.

Furthermore, it would seem reasonable to conclude that non-reported crimes are not as serious as reported crimes in the same category of offence since seriousness of the offence is the major determinant of crime reporting (Skogan, 1976). Robberies, rapes, burglaries and assaults all vary in the seriousness of the consequences to the victim, and victimization surveys are likely to capture those crimes which are on the less serious end of the continuum.

V. CONCLUSION

In conclusion, the question of 'what works' in crime prevention cannot be answered in terms of some predesigned strategy or set of strategies which one can expect to 'plug in' to any setting and achieve results. This paper suggests that a comprehensive set of strategies be developed in response to the clearly defined crime needs of a given community. These clearly defined needs along with an assessment of the resources available at different levels provide a more useful starting point than selecting a generalized crime prevention program. Take as an example the criteria selected by the Seattle criminal justice plan on programs for reducing juvenile crimes (Gunn, 1978:30-31).

> The city of Seattle only supports demonstration programs for reducing juvenile crime which include the following elements: (1) specific, identifiable, and quantifiable crime reduction objectives; (2) an evaluation process for measuring crime reduction effectiveness over time; (3) demonstrated effectiveness elsewhere or a high likelihood of demonstrating effective juvenile crime reduction locally; and (4) funding provided by discretionary resources available to the city....Programs which provide social services to youths but do not have a specifically identified target group about whom reasonably accurate predictions of delinquency can be made, should be rejected as juvenile crime prevention strategies....The city of Seattle will not fund activities unless they have demonstrated crime prevention success or unless they are capable of being evaluated on specific prevention objectives.

The key to a community crime prevention program that 'works' is found in properly defining the problem and the resources, developing a program plan which reflects those clearly defined problems and which taps those resources, and building into that plan a mechanism for evaluating whether the program plan is effective in achieving its goals. The evaluation at various stages during the program life can allow for modification and greater effectiveness. For examples of successful programs which follow these principles see Linden, Barker and Frisbie (1984).

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